

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number  
**WO 2005/083583 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 15/78**

**Paulus, W., F.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(21) International Application Number:  
PCT/IB2005/050439

(74) Agents: **ELEVELD, Koop, J.** et al.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(22) International Filing Date: 2 February 2005 (02.02.2005)

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
04100654.5 19 February 2004 (19.02.2004) EP

(71) Applicant (*for all designated States except US*): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

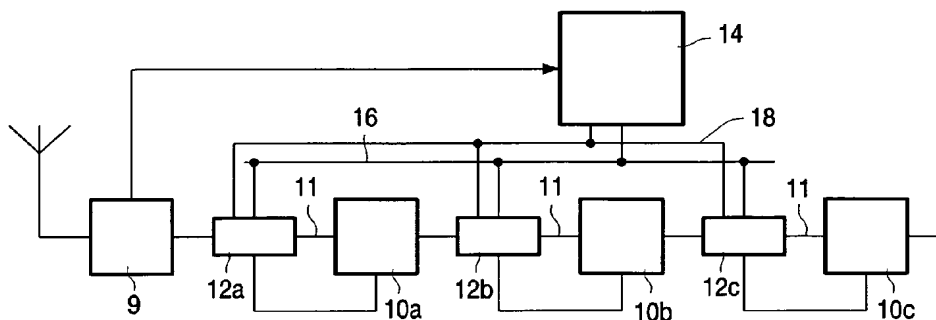
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **VAN DALEN, Edwin, J.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **DE BART, Abraham, J.** [NL/CN]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **GRUIJTERS,**

[Continued on next page]

(54) Title: ELECTRONIC STREAM PROCESSING CIRCUIT WITH LOCALLY CONTROLLED PARAMETER UPDATES, AND METHOD OF DESIGNING SUCH A CIRCUIT



(57) Abstract: An electronic circuit, in particular a receiver circuit contains a chain of stream processing circuits (10a-c). The stream processing circuits (10a-c) have control parameter inputs for receiving control parameter values. In order to facilitate design of circuits that receive data with a variable block size, a control circuit (14) is included that selects block sizes of blocks of samples in the respective streams of a plurality of the stream processing circuits (10a-c), a control parameter value for each particular block. The control circuit transmits instructions that specify the selected block sizes and control parameter values to local control circuits (11). Each local control circuit is coupled to the control circuit (14) and the control input of a respective corresponding stream processing circuit (10a-c) from the chain. Each particular local control circuit (11) is arranged to receive at least part of the instructions and to apply parameter values from the instructions to its corresponding stream processing circuit (10a-c). The particular local control circuit (11) controls timing of control parameter updates using block sizes from the instructions by counting off block size dependent time intervals between times points of successive control parameter updates. As a result there is no need to adapt the design of the stream processing circuits (10a-c) to the block sizes.

**Declaration under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,

HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

**Published:**

- with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.